

**In the Claims:**

Claims 1-26 were previously canceled and claims 27-40 are amended as follows:

1 –26        Canceled.

27 (Previously Presented) A process to produce a direct reduced iron product from lump feed material, comprising:

providing lump feed material derived from naturally humid sedimentary iron ore having a microstructure consisting essentially of micropores;

drying said lump feed material to a temperature of about 200°C and to a water content of less than 0.5% by weight; and

charging said dried lump feed material to a gas-based direct reduction process, thereby increasing the temperature of the dried lump feed material to more than 750°C within 30 minutes of said charging to said gas-based direct reduction process.

28 (Previously Presented) The process of claim 27, wherein said dried lump feed material is charged to the direct reduction process at a temperature of about 150°C.

29 (Previously Presented) The process of claim 27, wherein said step of drying said lump feed material includes placing it into a feed storage bin and oxidizing waste off-gases to heat said feed storage bin to effect said drying of said lump feed material.

- 30 (Previously Presented) The process of claim 29, further comprising charging said dried lump feed material from said feed storage bin to said direct reduction process via a thermally insulated charging system.
- 31 (Previously Presented) The process of claim 29, wherein said waste off-gases are supplied from a reformer associated with the direct reduction process.
- 32 (Previously Presented) The process of claim 29, wherein said waste off-gases are supplied to said storage bin at a temperature in excess of 300°C.
- 33 (Previously Presented) The process of claim 29, wherein said step of providing includes storing said lump feed material for a predetermined time of at least one month in an open atmosphere in a stockpile associated with said feed storage bin and thereafter drying said lump feed material.
- 34 (Previously Presented) A process to produce a direct reduced iron product from lump feed material, comprising:
- providing lump feed material derived from naturally humid sedimentary iron ore having a microstructure consisting essentially of micropores;
  - storing said lump feed material for a predetermined time of at least one month in an open atmosphere in a stockpile associated with a feed storage bin;
  - drying said lump feed material to a temperature of about 200°C and to a water content of less than 0.5% by weight; and
  - charging said dried lump feed material through a thermally insulated charging system to an upper part of a gas-based direct reduction furnace

and thereby increasing the temperature of said dried lump feed material to more than 750°C within 30 minutes of said charging.

35 (Previously Presented) A process for producing direct reduced iron from lump feed material, comprising:

providing said lump feed material derived from naturally humid sedimentary iron ore having a microstructure consisting mainly of micropores;

storing said lump feed material for a predetermined time of at least one month in an open atmosphere in a stockpile associated with a feed storage bin and thereafter reclaiming said lump feed material;

drying said lump feed material to a temperature of about 200°C and to a water content of less than 0.5% by weight;

charging said lump feed material to a thermally insulated charging system to an upper part of a gas-based direct reduction furnace;

heating the direct reduction furnace to create an enhanced, narrow temperature profile inside the furnace thereby raising the average temperature inside the furnace; and

increasing the temperature of said charged lump feed material to more than 750°C within 30 minutes of said charging.

36 (Previously Presented) The process of claim 35, wherein said dried lump feed material is charged to said direct reduction process at a temperature of about 150°C.

37 (Currently Amended) A process for producing direct reduced iron from lump feed material, comprising:

providing said lump feed material derived from naturally humid sedimentary iron ore having a microstructure consisting mainly of micropores;

storing said lump feed material for a predetermined time of at least one month in an open atmosphere ~~and thereafter reclaiming said lump feed material;~~

reclaiming said lump feed material to a feed storage bin, supplying waste off-gases to said feed storage bin to effect said drying of said lump feed material;

drying said lump feed material to a temperature of about 200°C and to a water content of less than 0.5% by weight;

charging said lump feed material to a thermally insulated charging system to an upper part of a gas-based direct reduction furnace; and

increasing the temperature of said charged lump feed material to more than 750°C within 30 minutes of said charging; ~~and~~

~~reclaiming said lump feed material to a feed storage bin, supplying waste off-gases to said feed storage bin to effect said drying of said lump feed material.~~

38 (Previously Presented) The process of claim 37, further comprising charging said dried lump feed material from said feed storage bin to said direct reduction process via a thermally insulated charging system.

39 (Previously Presented) The process of claim 37, wherein said waste off-gases are supplied from a reformer associated with said direct reduction furnace.

40 (Previously Presented) The process of claim 37, wherein said waste off-gases are supplied at a temperature in excess of 300°C.